

CLAIMS

What is claimed is:

1. A brake pad having a backing member comprising:
 - at least one first friction element formed from a first friction material;
 - and
 - at least one discrete second friction element formed from a second friction material, said at least one first friction element is spaced from said at least one discrete second friction element, both of said friction elements being connected to the backing member to form the disc brake pad.
2. The brake pad of Claim 1 wherein said first friction material is a non-asbestos organic material.
3. The brake pad of Claim 2 wherein said second friction material is a semi-metallic material.
4. The brake pad of Claim 1 wherein said at least one first friction element and said at least one second friction element are configured as a disc-shaped element and have about the same diameter.

5. The brake pad of Claim 3 wherein said at least one first friction element is connected to an outboard location of the backing member and said at least one second friction element is connected to an inboard location of the backing member.
6. The brake pad of Claim 2 wherein said non-asbestos organic material includes at least one of a phenolic resin, a silane coupling agent, a cashew friction dust, rubber, an organic fiber, a copper powder, a copper fiber, a ceramic Fiber, barium sulfate, a potassium titanate fiber, a mineral fiber, calcium hydroxide, mica, zircon, magnesium oxide, antimony sulfide, graphite, coke, and combinations thereof.
7. The brake pad of Claim 3 wherein said semi-metallic material includes at least one of a phenolic resin, a silane coupling agent, a cashew friction dust, rubber, an organic fiber, metal oxides, iron powder, barium sulfate, graphite, coke, and combinations thereof.
8. The brake pad of Claim 1 wherein said first friction material is about the same hardness as said second friction material.
9. The brake pad of Claim 1 wherein said at least one first friction element is spaced from said at least one second friction element to promote air flow around each of said friction elements.

10. The brake pad of Claim 1 wherein said at least one first friction element and said at least one second friction element are fixedly attached and spaced from the backing member to promote air flow behind each of said friction elements.
11. The brake pad of Claim 1 wherein said at least one first friction element and said at least one second friction element are releaseably attached to the backing member to enable reconfiguration of said friction elements.
12. The brake pad of Claim 1 wherein said at least one first friction element and said at least one second friction element are configured to resemble an indicia of source.

13. A method of manufacturing brake pads or shoes comprising:
 fabricating a plurality of discrete friction members; and
 connecting said plurality of said friction members in a spaced-apart formation onto a structural backing.
14. The method of Claim 13 wherein said plurality of said friction members includes at least one first friction member having a first material configuration and at least one second friction member having a second material configuration.
15. The method of Claim 14 wherein said first material configuration is a non-asbestos organic material.
16. The method of Claim 15 wherein said second material configuration is a semi-metallic material.
17. The method of Claim 13 wherein said plurality of said friction members are configured as disc-shaped members.
18. The method of Claim 17 wherein said friction members have about the same diameter.

19. The method of Claim 13 wherein said plurality of said friction members are configured as rectangular-shaped members.
20. The method of Claim 19 wherein said friction members have about the same dimensions.
21. The method of Claim 14 further comprising connecting said at least one first friction member to an outboard location of the structural backing.
22. The method of Claim 21 further comprising connecting said at least one second friction member to an inboard location of the structural backing.
23. The method of Claim 13 further comprising arranging said plurality of said friction members to promote air flow around each of said friction elements.
24. The method of Claim 13 further comprising configuring said plurality of said friction members to resemble an indicia of source.

25. A configuration of friction materials attached to a backing member of a brake lining comprising:

a first discrete friction member attached to the backing member;

and

a second discrete friction member in a spaced-apart configuration with respect to said first friction member, said second friction member attached to the backing member.

26. A process for making a brake pad including a structural backing comprising:
- providing at least one first friction member having a first material configuration;
 - providing at least one second friction member having a second material configuration;
 - providing the structural backing;
 - connecting said at least one first friction member and at least one second friction member in a discrete spaced-apart formation onto the structural backing; and
 - forming the brake pad, the brake pad having at least one first friction member located in an outboard location of the structural backing and at least one second friction member located at an inboard location of the structural backing.
27. The method of Claim 26 further comprising providing said first material configuration as a non-asbestos organic material.
28. The method of Claim 27 further comprising providing said second material configuration as a semi-metallic material.